AMENDMENT TO THE CLAIMS:

Please Amend Claim 1 as follows:

1. (Currently Amended) An inspection system comprising:

an autonomous remote controlled robotic vehicle including a sensor package for non-destructive inspection of a structure; and

a control station that provides control data to the remote controlled robotic vehicle to guide the remote controlled robotic vehicle around the structure, wherein the control data is based on a three dimensional model of a space in which the remote controlled robotic vehicle is to operate and in which the structure is located;

wherein the vehicle includes a low profile main chassis for maneuvering under portions of the structure to be inspected, an extendable mast fixedly coupled to the main chassis, the extendable mast being extendable substantially perpendicularly to the main chassis, and an articulating arm coupled to the mast; and

wherein the main chassis includes a propulsion system.

2. Canceled

3. Canceled

4. (Previously Presented) An inspection system as claimed in claim 1, wherein the propulsion system includes at least one electric motor and a battery.

5. (Previously Presented) An inspection system as claimed in claim 1, wherein the main chassis includes electronic control systems including a wireless communication system that enables communications between the robotic vehicle and the control station.

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Withdrawn) An inspection system as claimed in claim 1, wherein the sensor package includes an acoustic pulse generator and a vibrometer.

14. (Withdrawn) An inspection system as claimed in claim 13, wherein the acoustic pulse generator includes a main body, first and second electrodes coupled to the main body, and a flame arrestor.

15. (Withdrawn) An inspection system as claimed in claim 14, wherein the flame arrestor comprises a plurality of parallel plates.

16. (Withdrawn) An inspection system as claimed in claim 1, wherein the robotic vehicle includes a plurality of collision avoidance sensors.

17. (Withdrawn) An inspection system as claimed in claim 1, wherein the control station prepares an inspection plan based on a digitized map of the structure to be inspected and defines a path that the robotic vehicle will travel around the structure based on the inspection plan.

18. (Withdrawn) An inspection system as claimed in claim 1, wherein the control station performs analysis of data generated by the sensor package to identify anomalies in the structure being inspected.

19. (Previously Presented) An inspection system according to claim 1, whercin the height of the main chassis is less than one meter.

20. (Previously Presented) An inspection system according to claim 19, wherein the vehicle includes two motor driven wheels and a frec castor arranged in a triangular arrangement.